

Abstract

A mechanoluminescence material comprising a matrix of composite metal oxide containing strontium and aluminum, represented by the general formula $\text{SrM}^1\text{Al}_6\text{O}_{11}$ (wherein M^1 is an alkaline earth metal) or $\text{SrM}^2\text{Al}_3\text{O}_7$ (wherein M^2 is a rare earth metal), and further comprising, as luminescence centers, a metal selected from among rare earth metals and transition metals capable of emitting light when a carrier having been excited by mechanical energy returns to its ground state.